4. Evidence Base / Background Data

4.1. Introduction

4.2. Relevant Data

4.3. Summary of Key Findings

4.1. Introduction

To develop an evidence base for the Guildford Borough LCWIP, AtkinsRéalis compiled and reviewed a range of existing spatial data. This data helped to provide an understanding of existing and potential demand, issues, and barriers for active travel. Where appropriate, the data was mapped to overlay different pieces of information. The analysis included the following data sets:

- Key destinations.
- Existing walking and cycling infrastructure, including Public Rights of Way (PRoW).
- Existing public transport network.
- Propensity to Cycle Tool.
- Demographics, such as resident and workplace population, and car ownership.
- Indices of multiple deprivation.
- Potential development areas.
- Barriers and constraints, including topography.
- Pedestrian and cyclist collision data.
- Public suggestions for active travel provisions.
- Rapid cycle prioritisation toolkit.
- Strava data.

This chapter documents and summarises the data review. This background data informed the identification of key cycling routes and core walking zones, which is discussed in Sections 3 and 4. Additional supporting map evidence can be found in Appendix 1 (separate document).

4.2. Relevant Data

4.2.1. Key Destinations

Key destinations within Guildford Borough were mapped to identify locations or clusters that attract walking or cycling trips (Figure 16). These included:

- Commercial and high street areas.
- Rail stations.
- Schools.
- Hospitals.
- Medical centres.
- Parks and public open space.

Guildford Town was identified as a significant commercial area. Such areas are particularly important from an active travel perspective, as they are compact areas, serving a mix of trip generators throughout the day. These are often short trips, which could easily be made by walking or cycling. Convenient access to the local high street, shops and services is also central to the '20-minute neighbourhood' strategy identified in the Surrey Transport Plan.

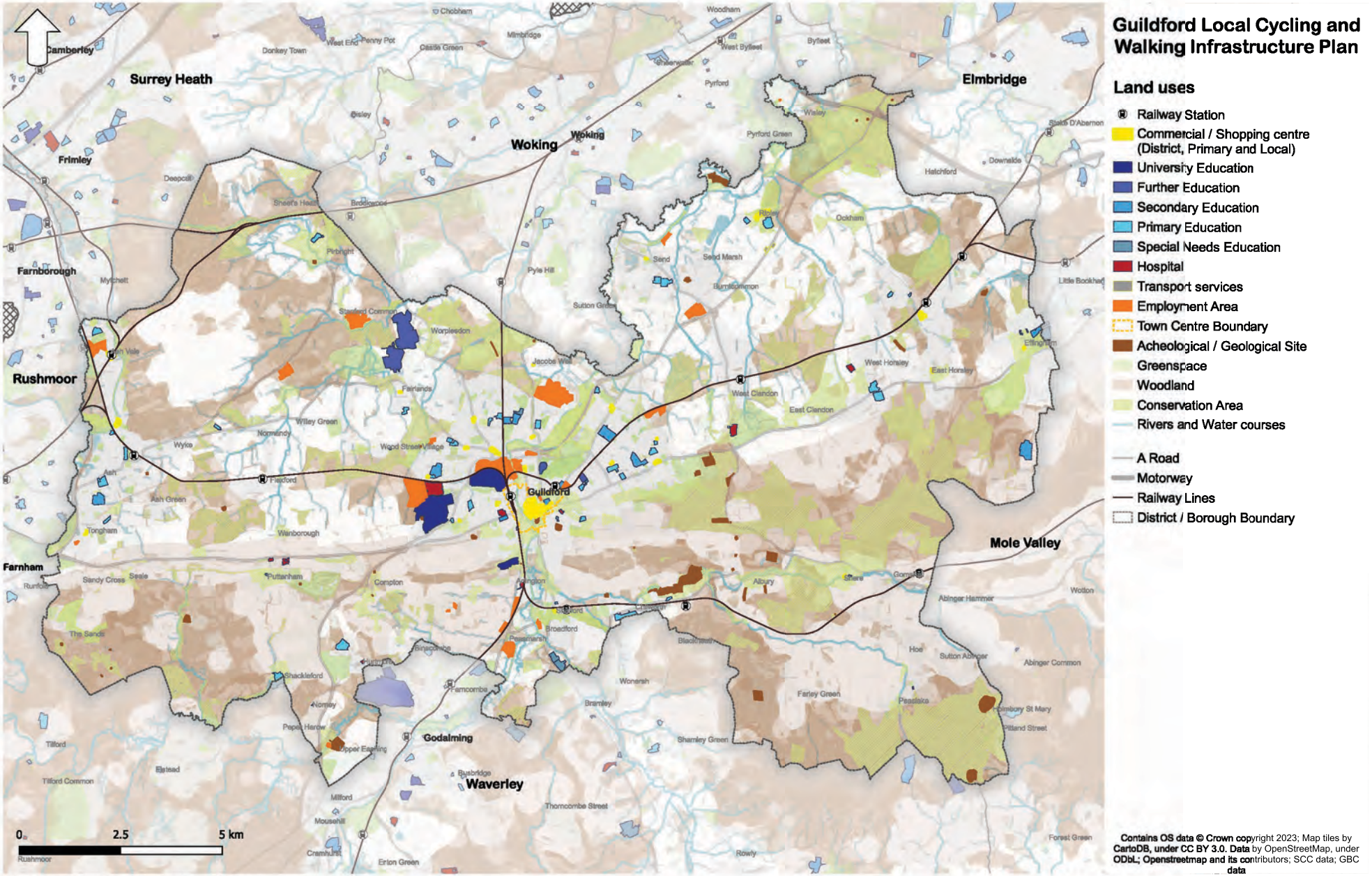

Figure 16. Key Destinations

4.2.2. Existing Walking and Cycling Infrastructure

Existing walking and cycling infrastructure within Guildford Borough provides a potential foundation upon which to improve and expand the walking and cycling network through the LCWIP.

Information on existing cycling infrastructure is provided through the online SCC Cycle Facilities Map. There is a mix of facility types and routes across the Borough as shown in Figure 17. Key existing routes include:

- A3 cycle corridor connecting north east Guildford (Borough) to Guildford urban area.
- National Cycle Network Route 22 connecting Guildford urban area to Farnham, Bramley and Woking.
- Surrey Cycleway provides north-south connections across Guildford Borough and east-west connections between the Guildford urban area and west of the Borough.

There are a number of cycle facilities concentrated in the Guildford urban area, with numerous cycle tracks, cycle parking, crossing facilities and junction modifications to accommodate cycling.

Existing cycle facilities typically reflect earlier design guidance, and generally are not aligned with recent LTN 1/20 guidance. There are several proposed schemes to expand or improve the cycle network, as referenced in Relevant Schemes & Previous Studies.

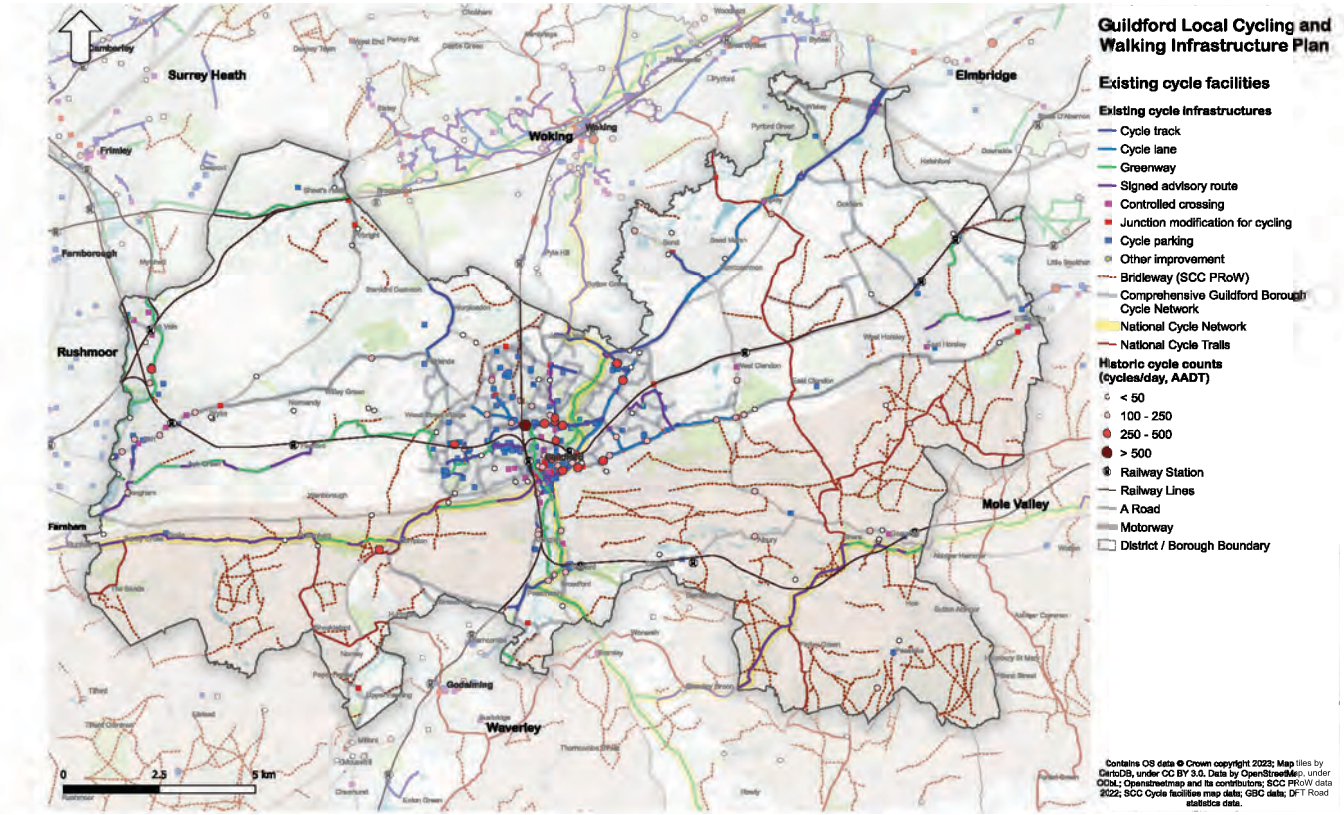

Figure 17. Existing cycling infrastructure in Guildford

Connectivity to the existing and proposed facilities, and/or improvements to these facilities, is considered as part of the LCWIP network development.

Additionally, a number of locations with historic cycle count data is available through the Department of Transport Road Traffic Statistics data portal[1]. Available count data within the study area from 2018 through 2023 is shown in Figure 17. The spot count locations indicate moderate existing cycle flows (250-500 cycles/day) in the north east and south east of Guildford town centre, Burpham, Ash and Compton. Relatively high cycle flows (>500 cycles/day) were observed in Guildford town centre. These existing cycle flows largely correspond with existing concentrations of cycle facilities. This information indicates

1 https://roadtraffic.dft.gov.uk/local-authorities/135

the high demand for cycle facilities within the Borough.

In addition to the road network, there are over 630km of footpaths and bridleways in Guildford Borough on Surrey's public rights-of-way (PRoW) network (Figure 18). This creates a large off-road network across the Borough and is part of the area's draw for leisure activities.

There is a concentration of this network in the south and south east of the Borough. Walking paths, including the North Downs Way, also make Guildford a popular leisure destination. However, across the Borough, these facilities do not provide a coherent network and are poorly integrated to provide connectivity and route choice options for utility walking and cycling trips, linking to the street and footway networks in urban areas.

The various types of cycle infrastructure and their extents are shown in Table 3. Similarly, the various types of PRoW present within Guildford Borough and their extents are shown in Table 4.

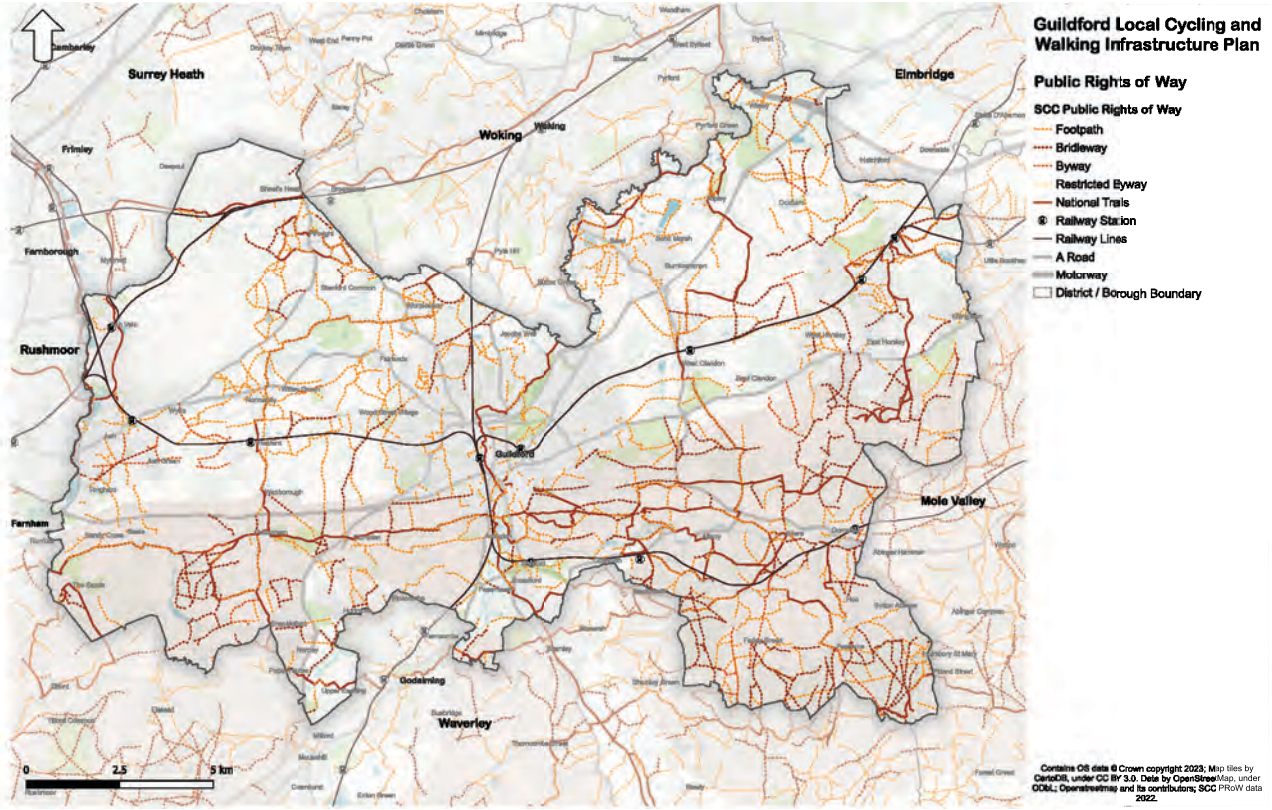

Figure 18. Existing public rights of way and public trails in Guildford Borough

Table 3. Typology and lengths of various cycling facilities in Guildford Borough

Facility	Length (km)
Greenway	24.4
Cycle track	29.9
Cycle lane	40.2
Signed advisory route	27.1
Total	121.6

Table 4. Typology and lengths of public rights of way in Guildford Borough

Public Rights of Way (PRoW)	Length (km)
Bridleway	218.0
Footpath	354.9
Total	574.9

4.2.3. Public Transport

4.2.3.1. Bus Network

Figure 19 illustrates the extent of the bus network in Guildford Borough, highlighting routes available, and stops where passengers can access the bus services.

Analysis shows bus provision is concentrated in the Guildford urban area. Connections between key areas including Ash, Shalford and Horsley are provided. Onward bus connections to Woking, Godalming and Farnham are provided.

Bus provision in rural areas, particularly in the south of the Borough, is limited in comparison to the urban areas of Guildford Town and Ash. This could be due to the lower population densities in these areas, which creates less demand and viability for a commercial bus service. The limited bus network in the rural areas is likely to increase the significance of car ownership, as residents become more dependent on personal transport for accessing services and facilities.

Bus stop locations indicate areas of demand for short walking trips, linking bus passengers with surrounding residential areas or key destinations. Concentrations of bus stops are noticeably higher along routes that serve urban areas, where there are higher population densities.

4.2.3.2. Railway Network

Guildford is connected to the National Rail Network and has 12 stations, including

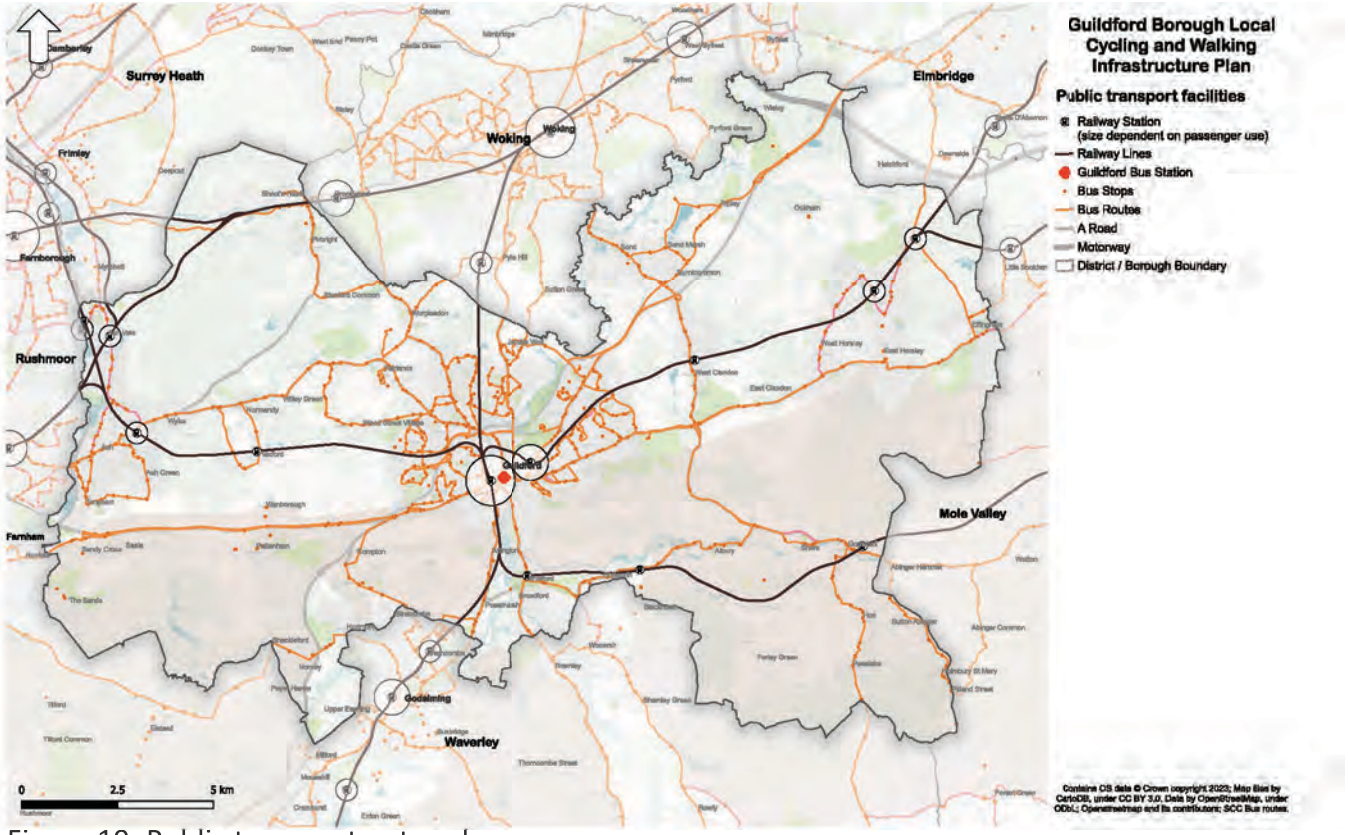

Figure 19. Public transport network

Guildford Railway Station, which provides onward connections and acts as an interchange, London Road Station, which has the second highest passenger numbers in the Borough (see Figure 19), and Ash Railway Station. There are four rail lines in the Borough, serving onward destinations of London Waterloo, Woking, Gatwick Airport and Reading. There is generally a good provision across the Borough, with east-west and north-south lines. However, there is a notable lack of provision in the south west of the Borough, where more rural areas may have limited options to travel to train stations by sustainable modes. Two new stations are proposed in Guildford Borough, which are outlined in Section 3: Previous Studies.

Railway stations are key destinations as they provide opportunities for sustainable long distance travel and link with walking and cycling routes to facilitate mode shift via linked-trips.

4.2.4. Propensity to Cycle Tool (PCT)

The PCT is an online tool and dataset designed to assist with strategic planning of cycling networks. It illustrates an indicative current and potential future distribution of cycle trips to work and to school based on different growth scenarios.

PCT indicates areas of higher potential demand, which suggests higher priority areas for improved infrastructure. Based on 2011 Census data, the Guildford Borough LCWIP PCT analysis modelled a variety of scenarios to understand existing travel patterns and identify routes that are likely to see increase in use. The full suite of PCT outputs is presented in Appendix 1 (separate document). Key observations from the analysis are summarised below:

4.2.4.1. Commuter Mode Share

Cycling typically accounted for less than 2% of existing commuter trips[1], but the PCT[2] illustrates high propensity for cycling growth, with much of the Borough having a cycle mode share of 10 - 25% under the 'E-Bike' scenario. The propensity is highest in the periphery of Guildford Town Centre (>25%), which could be due to higher population density and proximity to employment and education (University of Surrey as a major employer in the area) in these areas, as is shown in Figure 20.

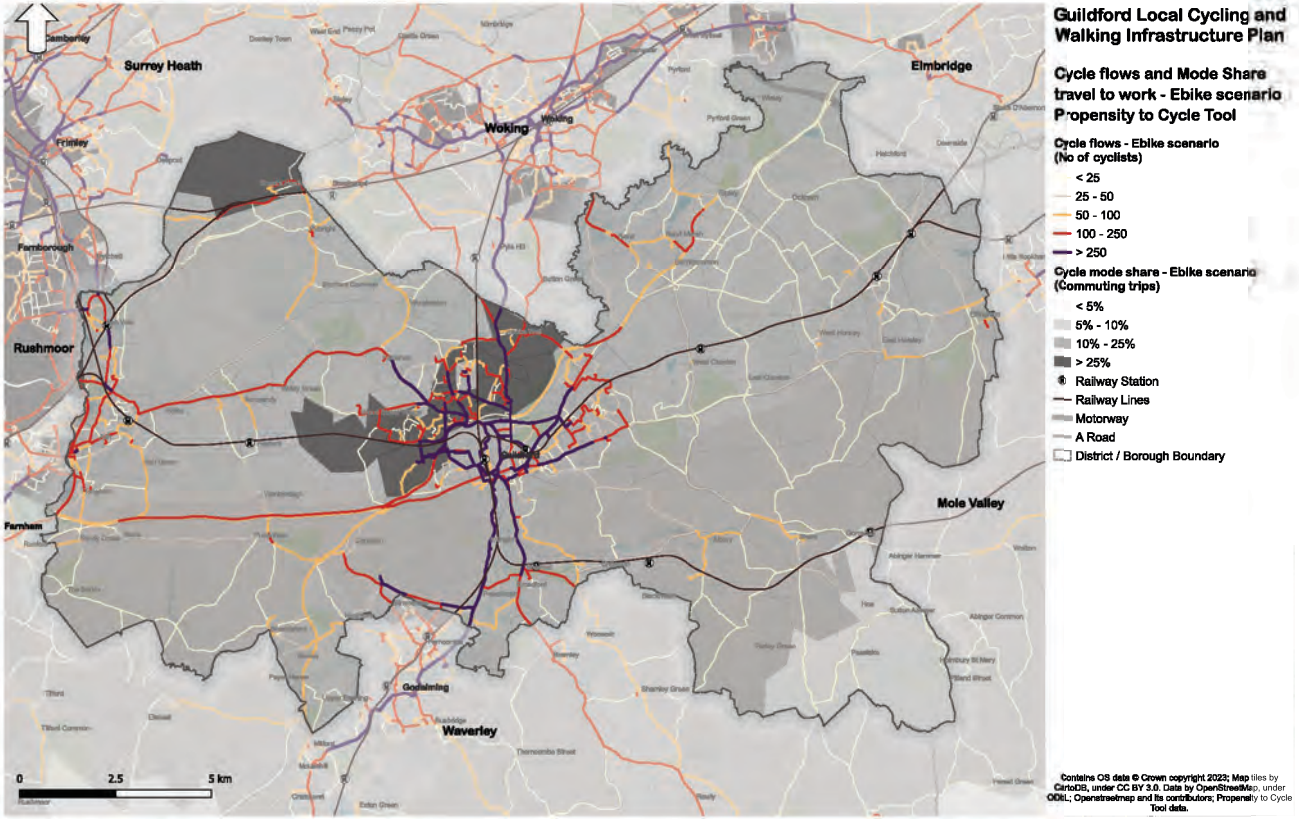

Figure 20. Journey to work cycling mode share based on the PCT 'E-Bike' scenario

4.2.4.2. Commuter Trips

Daily cycle commutes are relatively low, with less than 50 journeys along most routes. Exceptions to this pattern are seen in Guildford Town Centre and approach routes, where higher rates were observed. A selection of radial routes approaching Guildford Town Centre had over 50 daily trips. These include Stoke Road (north), London Road (east), Portsmouth Road (south), and Egerton Road (west). Under the 'E-Bike' scenario (Figure 20), there is a significant increase in the number of trips, revealing a strong north south desire line in the centre of the Borough, as well as

1 Based on the 2021 Census data for Travel to Work.

2 PCT is based on the 2011 Census data for Travel to Work, and may not reflect current trends.

4.2.4.3. Short Distance Walking Trips:

Walking trips for the purpose of commuting are prevalent mainly around Guildford Town Centre, the areas surrounding railway stations, and near major trip attractors such as the University of Surrey, as shown in Figure 21.

4.2.4.4. Short Distance Car Trips:

The PCT identified where short commuter trips are currently made by car, which could realistically be replaced by cycling and walking modes of travel. Figure 22 highlights popular short distance routes (less than 2km) that could be completed by active travel means.

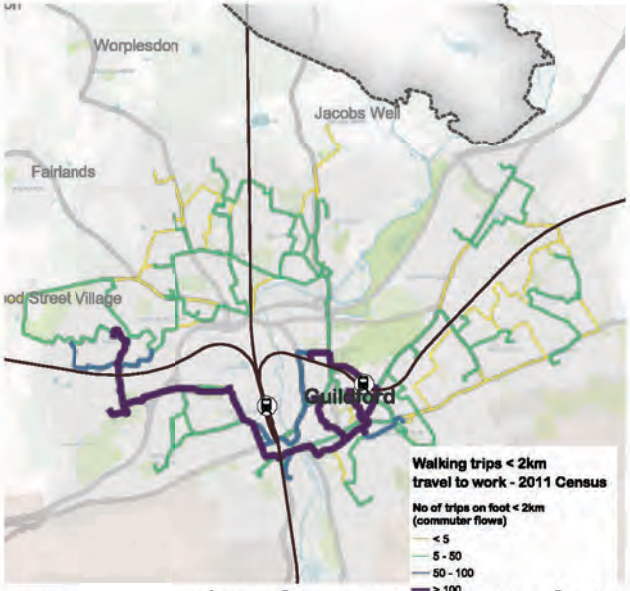

Figure 21. Number of commuter trips on foot of <2km for Guildford Town based on PCT, 2011 Census

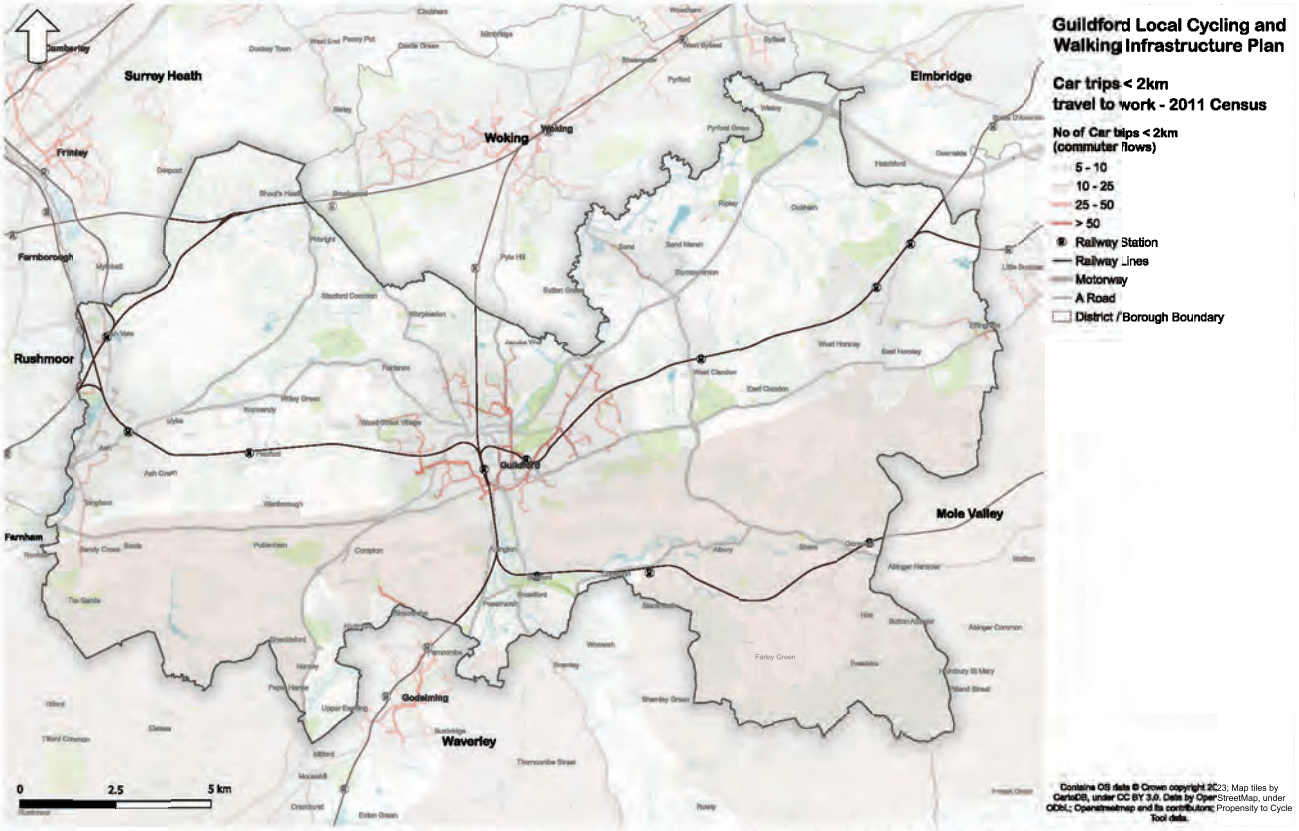

Figure 22. Number of commuter trips by car of <2km based on PCT, 2011 Census

4.2.4.5. PCT Commuter Flows - Desire Lines

The direct point-to-point desire lines in the PCT between home and work were reviewed to understand the commuter trips in the Borough with greatest potential for increased cycle usage. The straight lines based on number of commuters per day of origin/ destination (O/D) pairs are illustrated in Figure 23 (MSOA[1] pairs) and the key outcomes of this analysis are:

- The top MSOA and LSOA[2] - O/D pairs indicate one key centre of O/D: Guildford town centre.
- Distribution of shorter trips between areas of Guildford Borough, particularly outer residential areas, such as Boxgrove, Park Barn, and Bellfields, and into Guildford town centre.
- The University of Surrey creates significant commuter demand from surrounding areas.
- Guildford town centre creates high demand from trips from the northern and southern areas of the Borough and beyond, including Woking Borough, and Shalford, as well as the west, including Ash and into Rushmoor Borough.

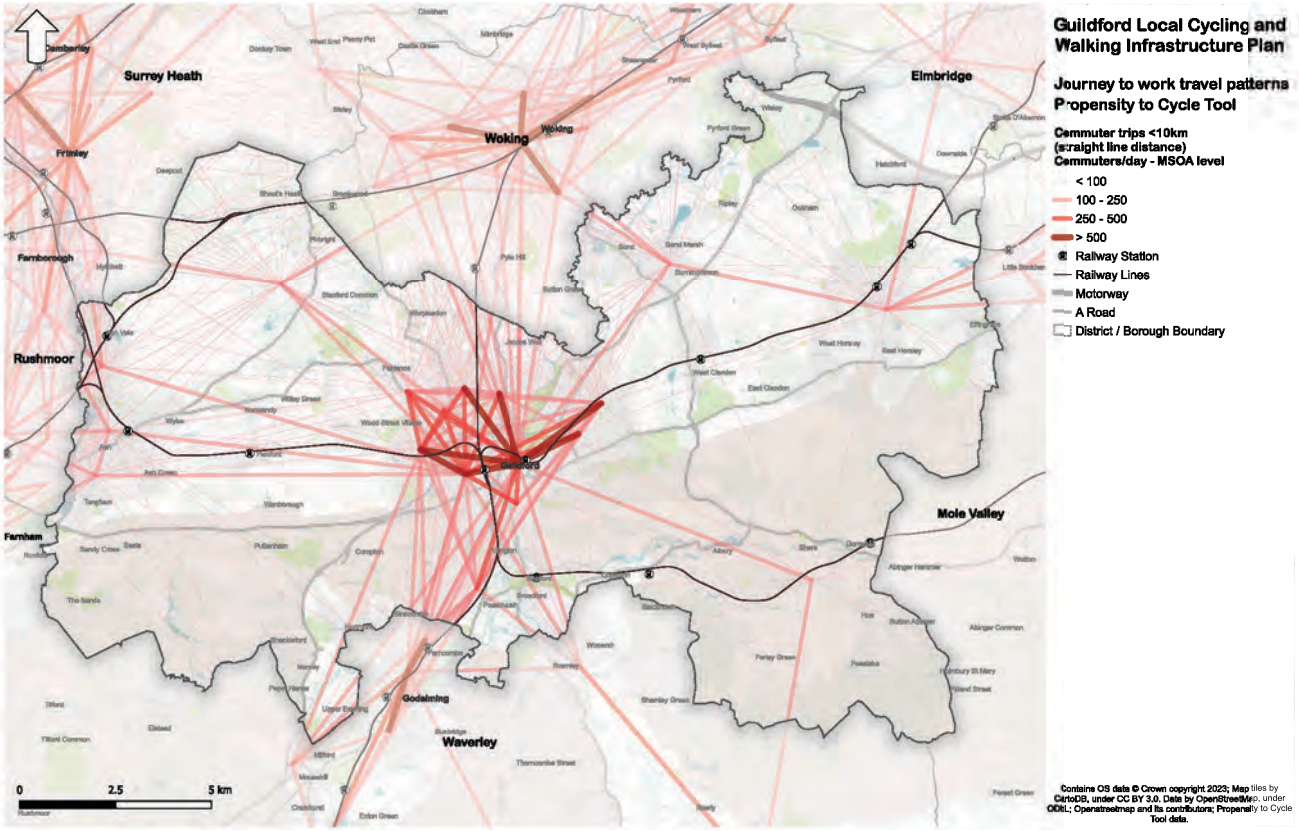

Figure 23. Number of commuter trips by car of <2km based on PCT, 2011 Census

1 MSOA stands for Middle Layer Super Ouput area, made up of groups of LSOAs, and usually includes a resident population between 5000 and 15000 people.

2 LSOA stands for Lower Layer Super Output Area, and usually includes a resident population between 1000 and 3000 people.

4.2.5. Resident Population and Employment

Population data can provide a proxy for potential demand for walking and cycling trips.[1] As many trips begin or end at home, higher population densities can indicate a greater propensity for walking and cycling trips. Higher densities can also indicate a more conducive environment for walking and cycling, such as closer proximity of origins and destinations and a more compact built-up area.

Workplace population density is indicative of key employment areas and is another key input into the identification of walking and cycling networks.

Figure 24 shows the highest population densities and dominant employment zones are concentrated in Guildford urban area as the primary urban centre, and Ash. This suggests there are greater opportunities for short distance walking or cycling trips in these urban areas.

The data also shows that key employment zones include Guildford urban area, Woking, Godalming, Farnborough and Frimley. Though the majority of these towns are located outside of the Borough, they should

1 During the development of the LCWIP, 2021 Census data were not available in MSOA and LSOA levels. The information provided in the section uses ONS data estimating the population in 2020.

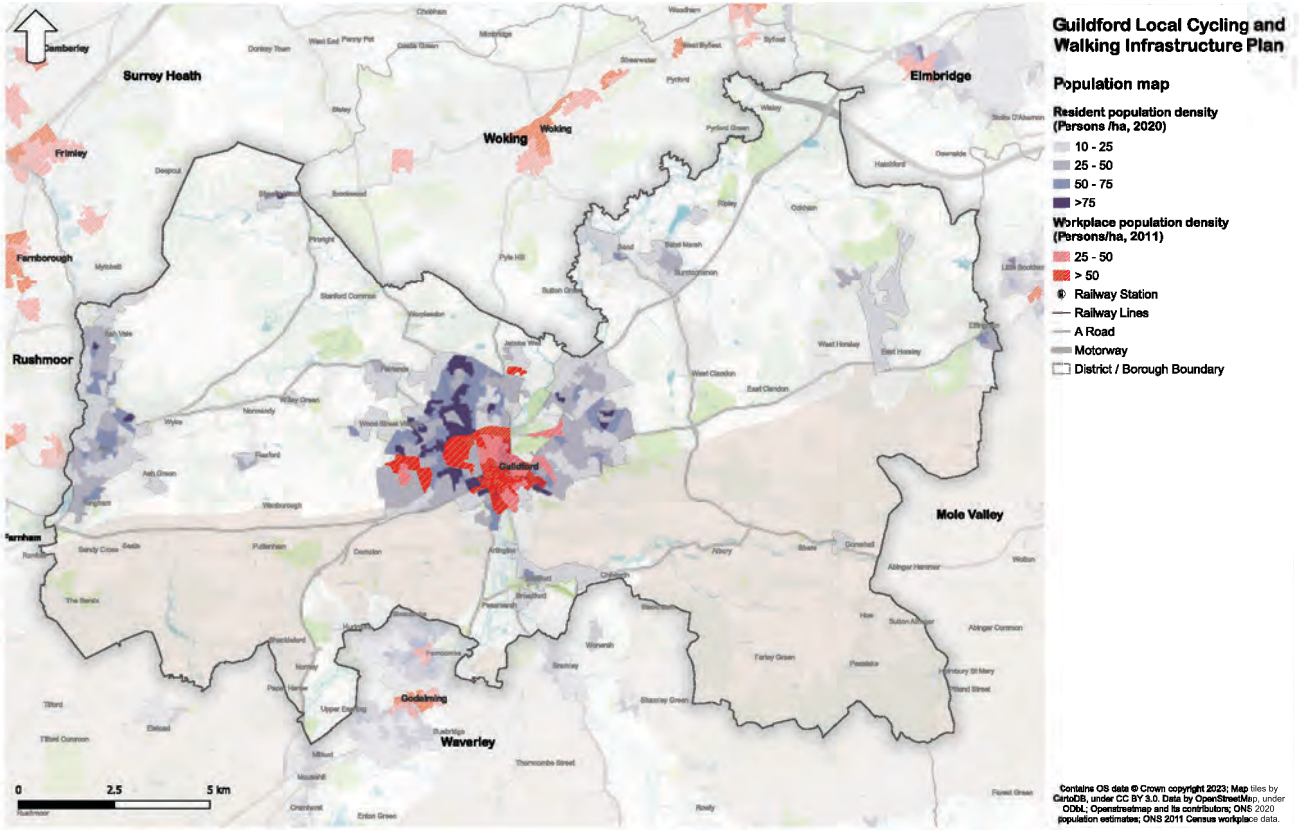

Figure 24. Population and Employment

Table 5. Population data for Guildford Borough (Source - ONS Census 2021)

Area	2011 Census	2021 Census	% Change	Population Density[1]
Guildford Borough	137,200	143,650	4.7%	531
Surrey County	1,132,390	1,203,100	6.2%	724
England	53,012,456	56,489,800	6.6%	434

1 Usual residents per sq km

be taken into consideration due to being places of employment, which are likely to attract workers from Guildford and the surrounding region.

4.2.5.1. Future Developments

It is important to understand where future growth is likely to take place. Appropriate walking and cycling infrastructure can then be provided, which creates opportunities for active travel and supports local communities.

Figure 25 highlights large housing sites, their status, and sites allocated for future development. Guildford urban area is a key area of growth with the following large developments proposed:

- Blackwell Farm (1800 homes)
- Gosden Hill Farm (1800 homes)
- Weyside Urban Village regeneration project (1500 homes proposed).

Extensions to the Ash urban area are also planned and being built out. For example, 1750 new homes are allocated as part of Policy A31: 'Land to the south and east of Ash and Tongham'. Furthermore, the redevelopment of the former Wisley Airfield will deliver 2000 homes in Ockham.

The future of each of these proposals is not certain, but the proposals should be taken into consideration due to the scale of the sites and the potential effects on surrounding areas. Section 3: Previous Studies explains potential improvements to the active travel network that would complement these developments.

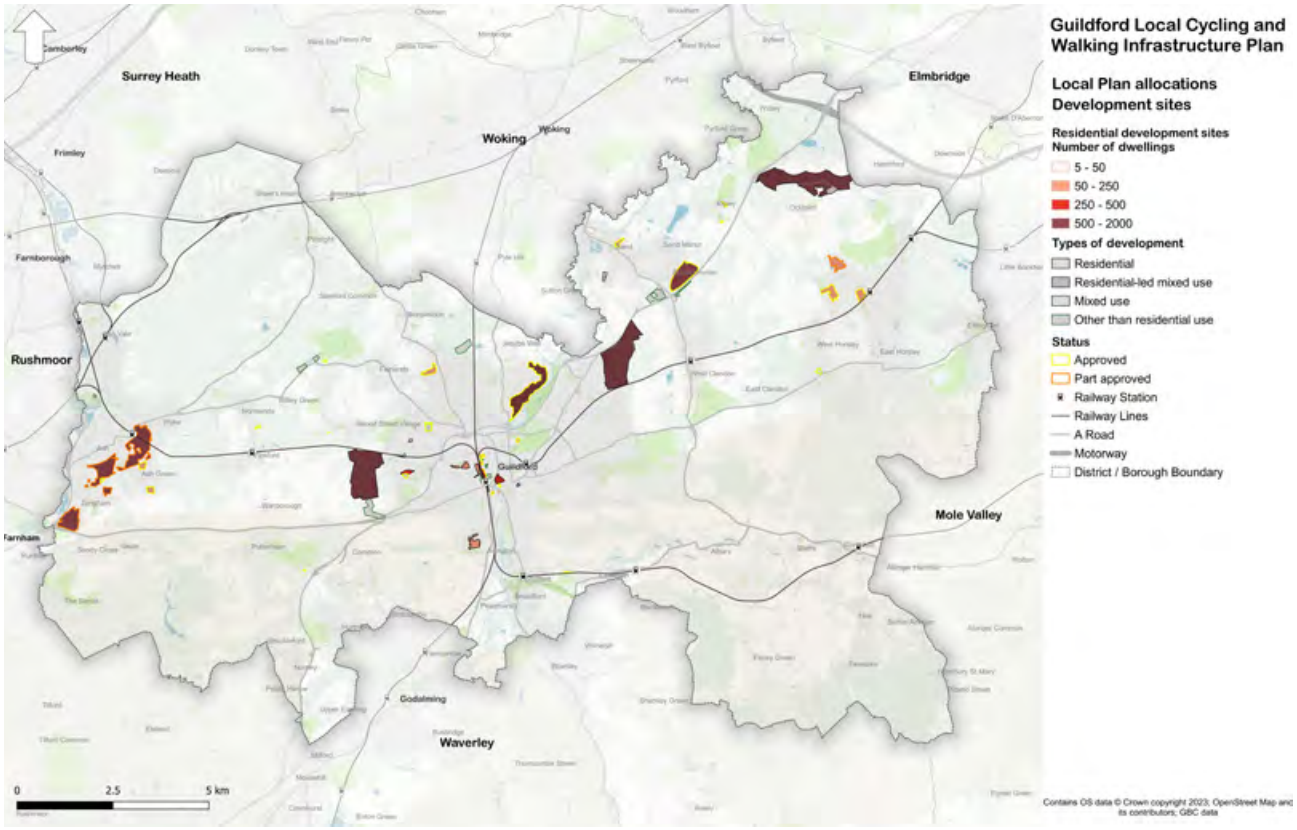

Figure 25. Future development sites in Guildford

4.2.6. Indices of Multiple Deprivation

The Indices of Multiple Deprivation (IMD) is a measure of relative deprivation for small areas/ neighbourhoods in England. It measures income, employment, health, education, crime, living environment and barriers to housing and services. The information was used for the identification of under served areas featuring greater deprivation and therefore which areas may benefit the most from walking and cycle corridor improvements.

Areas in the first decile represent the most deprived areas, whereas the 10th decile represents least deprived areas.

Figure 26 shows that a large proportion of wards are in the top four IMD deciles (7th-10th deciles), suggesting high levels of affluence and low deprivation for much of the Borough. There are areas where wards have low IMD rankings (2nd - 4th deciles), these being in areas north and west of the Guildford urban area, Ash, and north east of the Borough. It should be noted that these areas of lower affluence and higher deprivation are located adjacent to areas with the highest levels of affluence. Key barriers, such as railway lines and major roads affect the deprivation ranking of these areas.

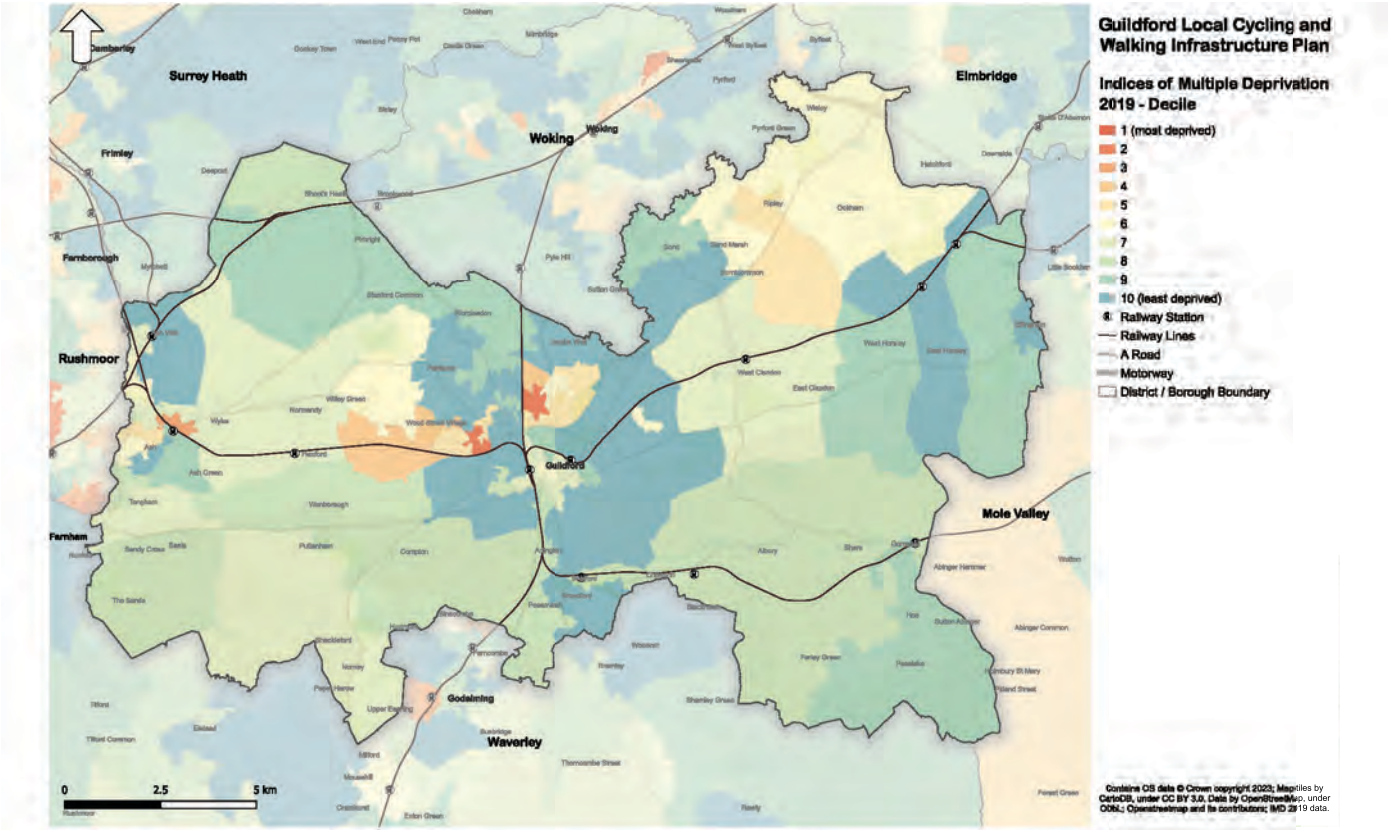

Figure 26. Index of Multiple Deprivation

4.2.7. Population with disabilities

There is a relatively high proportion of the Borough where more than 15% of the population has a disability. This is spread relatively evenly across the Borough. Compared to the national UK average of 22%, these rates are relatively low.[1] There are a number of inequalities that exist between abled and disabled people, including in education, employment, housing, and wellbeing.[2] Better walking connections to

1 Family Resources Survey 2020-21, https://www.gov.uk/government/statistics/family-resources-survey-financial-year-2020-to-2021/family-resources-survey-financial-year-2020-to-2021

2 ONS 2021, Outcomes for disabled people in the UK: https://www.ons.gov.uk/peoplepopulationandcommunity/

local services can improve well-being for this group, and it is the aim of the LCWIP to provide positive outcomes for physical and mental health. A map showing the geographic distribution of people with disabilities can be found in Appendix 1 (separate document).

4.2.7.1. Car Availability

Overall, car availability is found to be relatively high across Guildford, potentially reflecting the affluent prosperity of the Borough. The highest levels of car ownership are found in rural areas of the Borough, where there is greater dependency on private vehicle use to access local facilities, due to the relatively limited and infrequent provision of public transport.

The lowest rates of vehicle availability are found in the centre of the Borough, in the primary urban area of Guildford Town, with multiple wards having more than 30% of households without a car/van. Specifically, the area surrounding the University of Surrey has a low rate of car ownership, reflecting the local student population that relies on active travel and public transport to access amenities. Further settlements of Ash, Shalford, and parts of Send and Ripley have lower levels of car ownership compared to the Borough overall (see Figure 27).

There is evidence that some households in these urban areas do not own a car at all, suggesting a greater reliance on walking, cycling or public transport. Lower levels of ownership in these urban centres may reflect the high level of facilities within walking distance and the relatively good provision of public transport services.

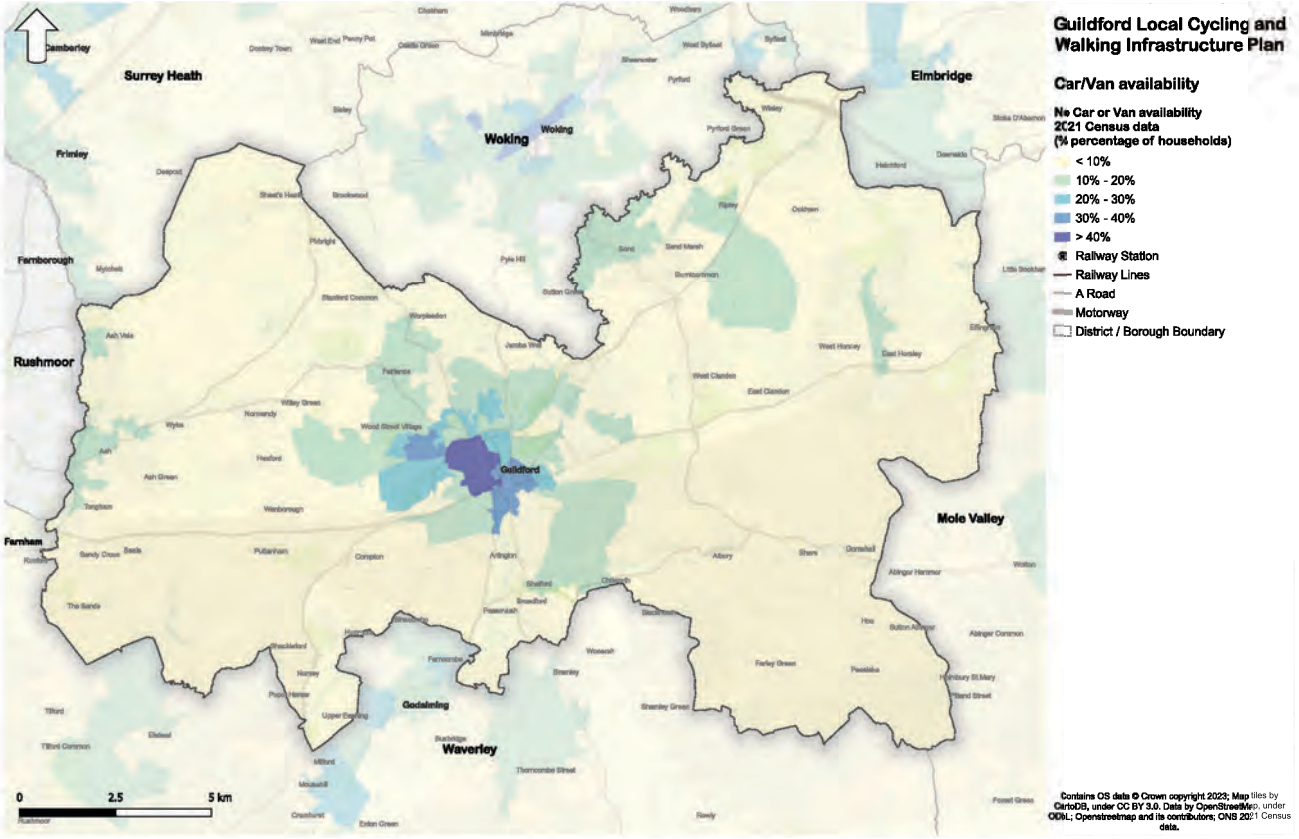

Figure 27. Percentage of households with no car or van availability

healthandsocialcare/disability/articles/outcomesfordisabledpeopleintheuk/2021

4.2.8. Collision Data

As part of the LCWIP, a high-level review of recent collision data (2018-2023) involving pedestrians and people cycling was undertaken. This provided an understanding of where collisions are occurring and routes that could benefit from safety improvements as part of an LCWIP scheme. A summary of pedestrian and cyclist collisions is shown in Table 6 on page 63.

4.2.8.1. Pedestrian Collisions

Figure 28 presents a 'heatmap' illustrating the location, severity and relative concentration of pedestrian collisions within Guildford. Concentrations of collisions are recorded in the urban areas of Guildford, Ash and Tongham.

This is likely due to the higher population density and agglomeration of key destinations in these parts of the Borough (as summarised in previous sections), hence greater propensity for walking and cycling activity and higher traffic in these areas.

Relative collision 'hotspots' for pedestrians include:

- Guildford Gyratory.
- North Street, Guildford.
- Guildford Park Road.
- Epsom Road.

4.2.8.2. Cyclist Collisions

The locations and severity of cyclists' collisions are shown in Figure 29. As with the pedestrian collisions, clustering of cycling incidents is visible in the built up urban areas, where there are relatively higher population densities and vibrant commercial areas. Concentrations of cyclist collisions include the urban areas of Guildford, Ash and Tongham.

Hotspots for cyclist collisions include the following areas:

- Ladymead/Parkway, Guildford.
- A320/Stoke Road, Guildford.
- London Road, Guildford.
- B2215, Send to Ripley.

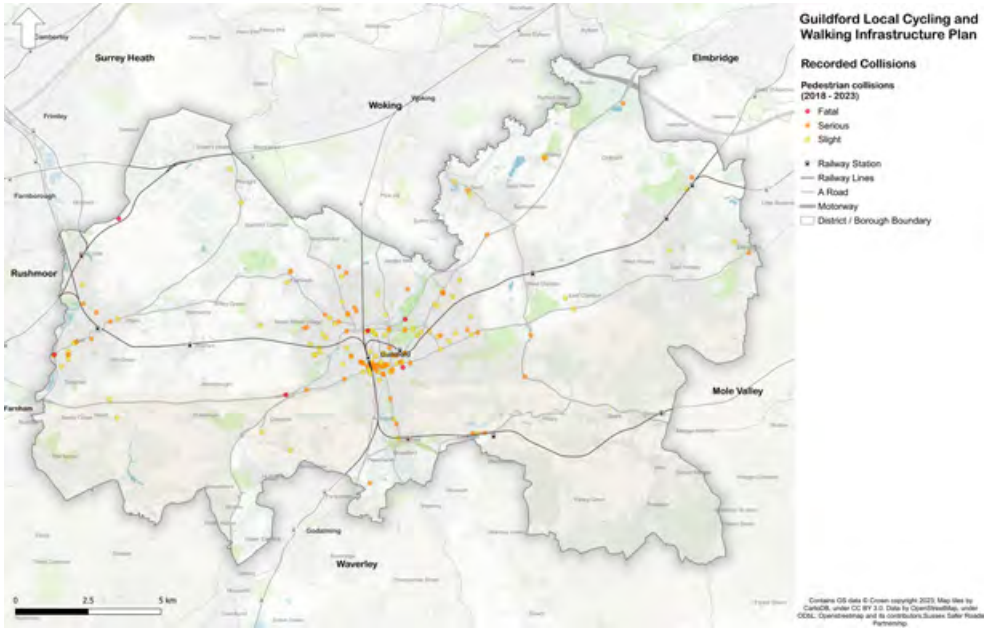

Figure 28. Pedestrian collisions

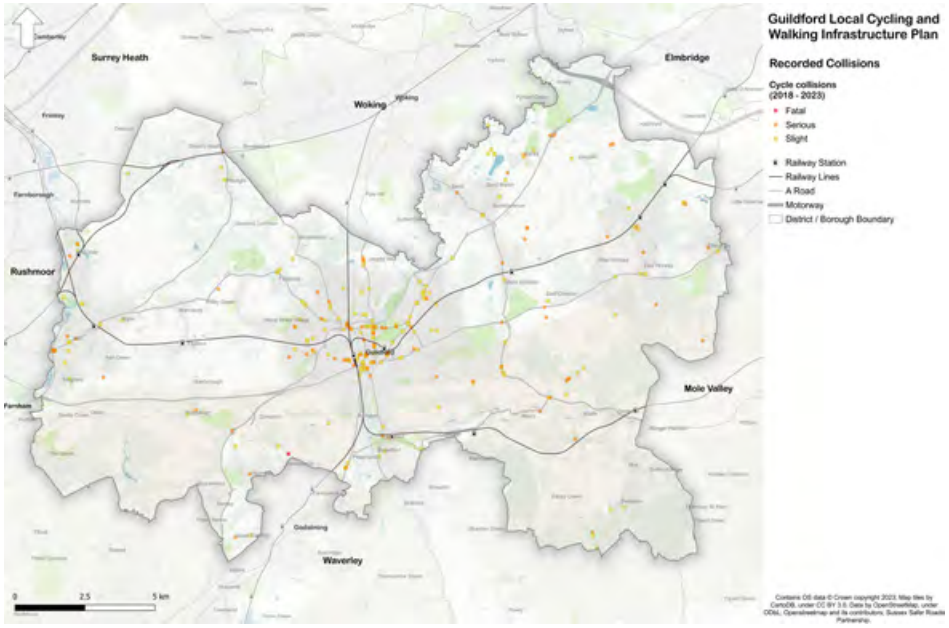

Figure 29. Cyclist collisions

Table 6. Collisions, by severity

2018-23	Pedestrians		Cyclists	
Severity	Total	Avg/ Yr	Total	Avg/ Yr
Fatal	7	1.4	1	0.2
Serious	63	12.6	88	17.6
Slight	116	23.2	177	35.4

4.2.9. Barriers and Constraints

Severance is a significant barrier to mobility in Guildford Borough, particularly for active travel modes. Some of the main barriers and constraints are illustrated in Figure 30. These include:

- Four railway lines traverse the Borough, severing the local road network and funneling all modes of traffic to a limited number of crossing points.
- Guildford Town Centre has significant level differences, making some areas unattractive for active travel, especially for cycling.
- Several A and B roads, along with the local street network, create physical and psychological barriers to active travel. In particular, the A3, A31, A246 and A25 are busy dual carriageways that provide east-west connectivity, but impede north-south movement, with access limited to main crossing points. The distance between crossing opportunities creates a significant barrier for all modes, particularly the viability of short trips via walking or cycling.
- Motor vehicle speed can be a barrier to active travel, where walking or cycling alongside or crossing high speed traffic can create an unpleasant, uncomfortable, or unsafe environment.
- Villages are dispersed throughout the Borough, and are often distant from each other, increasing reliance on motor vehicles.
- Watercourses, including the River Wey, meander through Guildford, providing valuable wildlife habitat and a destination for outdoor recreation, but they also create natural barriers to active travel movements, restricting journeys to designated crossing points.
- The Surrey Hills are depicted by the dark brown contour lines in Figure 30. A horizontal band of steep terrain is identified along the south of the Borough, with terrain of 150-200m in this band south of Horsley. The steepest terrain is identified in the south-east corner of the Borough, near Peaslake. This landscape may appeal to competitive cyclists, but the challenging ascents may deter casual riders and commuters from cycling in this region.

Figure 30. Barriers and Constraints in Guildford Borough

Pedestrians and cyclists can be deterred from using paths with a steep gradient or declination, due to the associated difficulties of using the route. The difficulty is often experienced more significantly amongst user groups with disabilities and mobility impairments. In contrast, flat and low lying areas can be found in the north and north east of the Borough near Worplesdon and Burntcommon, which are likely to be more conducive for cycling.

4.2.10. Online Public Comments

'Widen My Path' and 'SCC LCWIP Commonplace map' are online tools where the public can register a comment with regards to walking and cycling infrastructure. This information helps local authorities identify and prioritise interventions to better enable and promote active travel.

In total, 990 comments were logged on the Commonplace platform for Guildford Borough, with 3247 agreements on the comments.1

1 Users are able to 'agree' with existing comments on Commonplace, showing agreement and/or support for a view or issue identified.

Comments on pedestrian and cycling facilities were evenly split. The Widen my path platform registered 91 comments on the cycle facilities in the Borough, with 469 agreements.

Data from these online platforms has been reviewed as part of the option identification process and has also subsequently informed the measures that are required at specific locations. Figure 31 provides a visual representation of higher priority areas for walking and cycling improvements, from the perspective of local residents.

A high number of comments were recorded in Guildford urban area, with further areas including Ash, Tongham, Shalford, and East

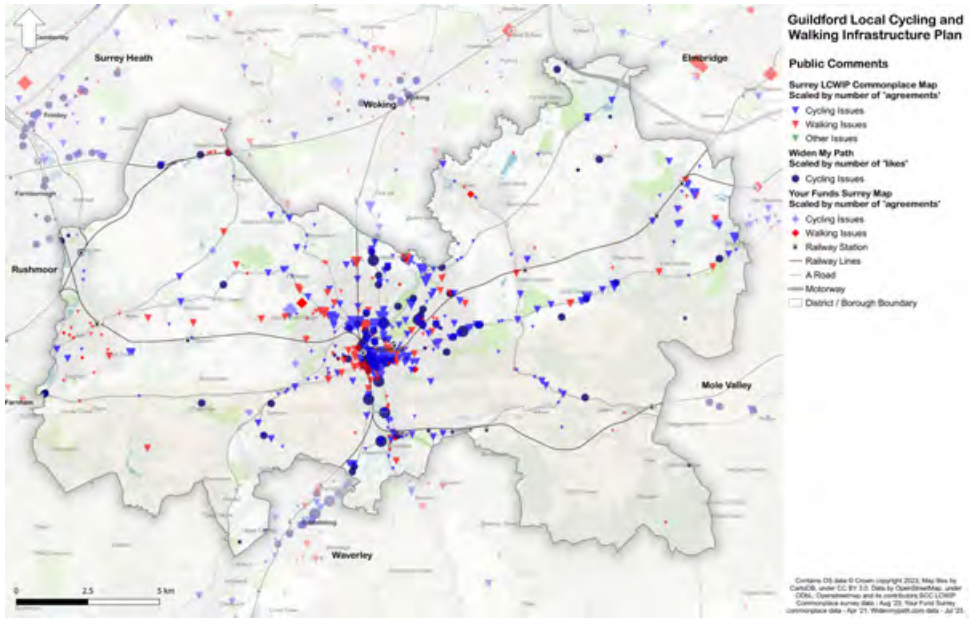

Figure 31. Online Public Comments

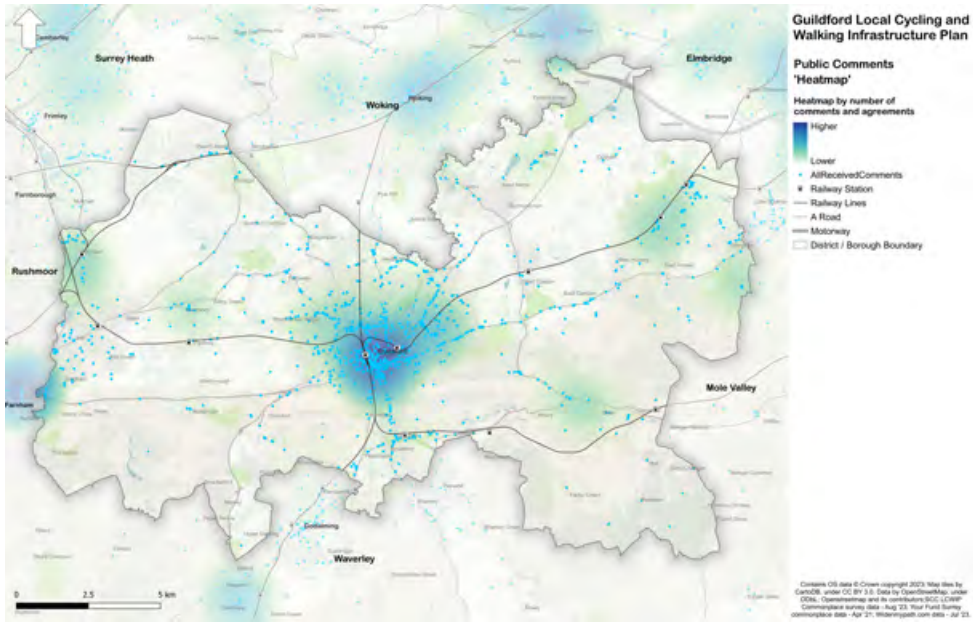

Figure 32. Heatmap of online comments

Horsley. Key roads received a number of comments, including Epsom Road (between Guildford and Effingham) and Woking Road.

The following issues and themes were raised across the Borough:

» Lack of dedicated cycle lanes.
» Where cycle lanes do exist, they are in a poor condition and considered unsuitable for cyclists.
» Lack of appropriate road crossing infrastructure for cyclists and pedestrians.
» Support for new cycle lanes, safer road crossings, junction enhancements to improve safety, reduced speed limits and the introduction of road interventions to slow traffic.

4.2.11. Composite Commonplace

A composite heatmap illustrating the location and level agreement for both pedestrian and cycling issues across the available online comment platforms is illustrated in Figure 32. This map provides a visual representation of higher priority areas for walking and cycling improvements, from the perspective of local residents.

4.2.12. Crime levels

Crime data from Surrey Police (2009 - 2022) shows that although crimes were reported across the Borough, these largely correlated to more urban areas. All types of crime were clustered around Guildford urban area. A further cluster was identified along the western border of the Borough in the Ash area.

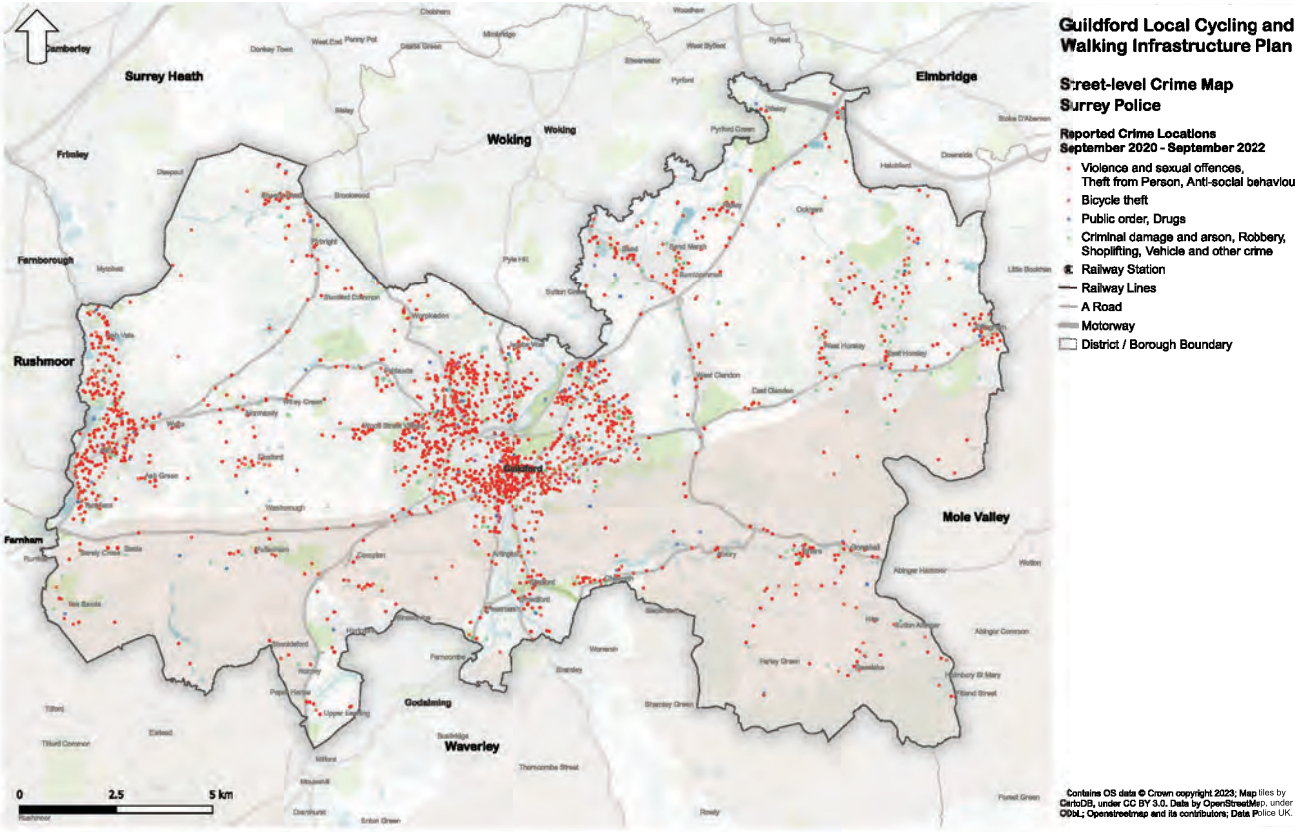

Figure 33. Reported crime in Guildford Borough

Most crimes reported were violence and sexual offences, theft from person, and anti-social behaviour, and this was clustered in Guildford urban area and Ash, correlating with denser urban areas. Higher real or perceived criminality deter people from walking and cycling during the hours of darkness and hotspot locations help us identify areas where improvements to personal safety should be considered.

It should be noted that this data considers only reported crime, and so is not fully reflective of all crimes, which may not be reported.

4.2.13. Commuting patterns

Census data provides information on the main commuting inflows and outflows to/from Guildford, which is shown in Figure 34 and Figure 35.[1]

Guildford's neighbouring boroughs, Woking, Waverley, Rushmoor, Surrey Heath and Elmbridge are among the top five inflows and/or outflows. This indicates the importance of inter-borough connectivity when developing the cycle (primarily) network.[2] Many of the commuter flows are also connected by railway services, including Guildford, Woking and London. This indicates the importance of providing high-quality walking and cycling links to railway stations, to facilitate and encourage linked active travel/public transport trips.

Within Guildford Borough, movement included 16'000 people living and working in the Borough, and an additional 40'000 people who work from home and do not commute. As noted, the 2021 Census was undertaken during the Covid-19 Pandemic.

The largest movement into Guildford was 4,334 people from Waverley, followed by Rushmoor (2,866 people) and Woking (2,626 people).

1 The 2021 Census was undertaken during the Covid-19 pandemic, and so reflects a specific period where commuting patterns were significantly impacted.

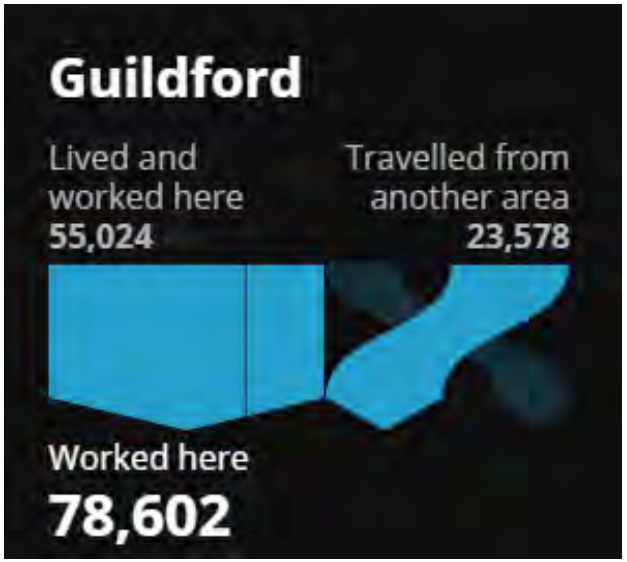

Figure 34. Commuter inflows to Guildford Borough (ONS)

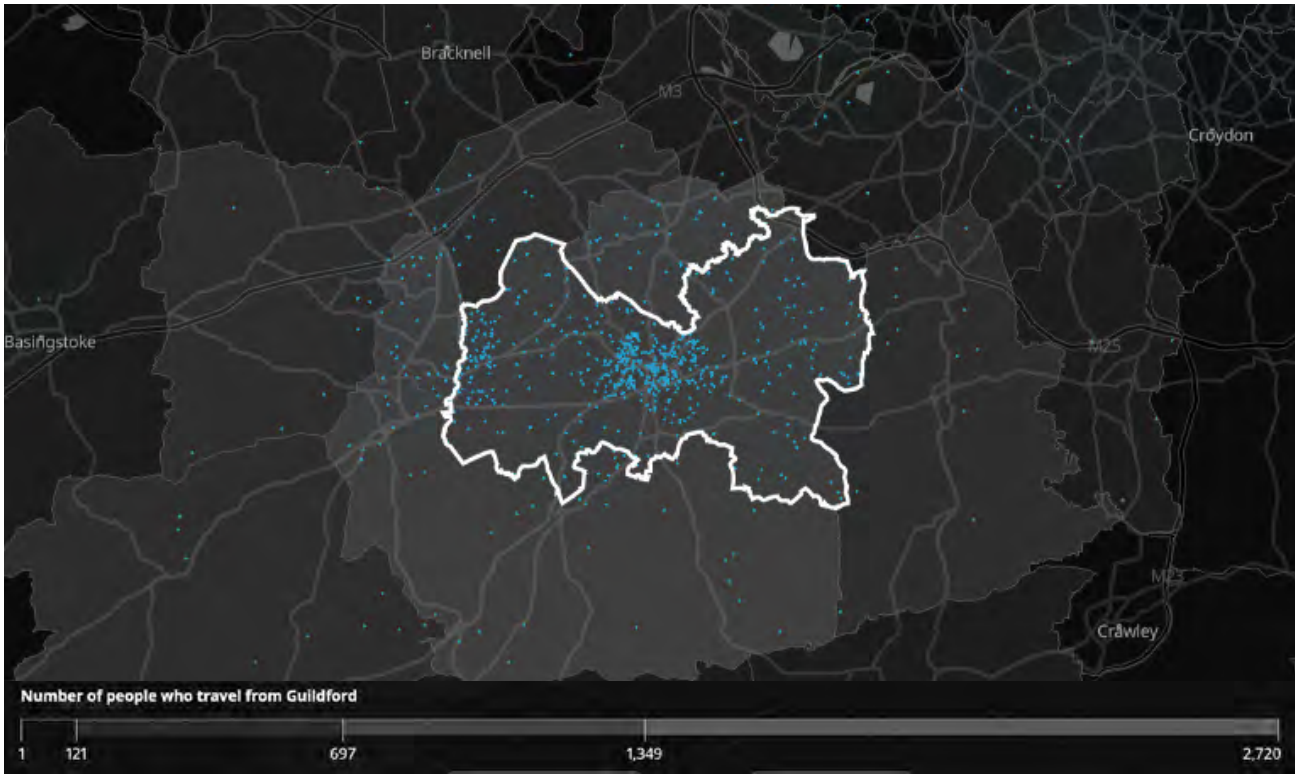

Figure 35. Commuter outflows from Guildford Borough (ONS, Census 2021, Travel to Work Dataset)

2 Pedestrian movements are limited to shorter distances, however there are instances that inter-borough connectivity on foot may be achievable.

The largest movement of people out of Guildford was 2,720 people to Waverley, followed by Woking (1,702 people) and Rushmoor (1,349 people).

4.2.14. Cycling Infrastructure Prioritisation Toolkit

The Cycling Infrastructure Prioritisation Toolkit (CyIPT) is a collection of tools aiming to provide an evidence-base for prioritisation of transport infrastructure that will get more people cycling.[1]

CyIPT uses the PCT to provide data on the existing and future cycling flows on each road. This data is in turn taken from the 2011 Census commuting flow data. CyIPT is biased towards commuter cycling due to using the PCT data.

CyIPT has a 2011 view of travel patterns but for existing travel and as a baseline for predicting future demand.

The top routes, cohesive networks and existing cycleways within Guildford, identified through the CyIPT tool are shown in Figure 36. As indicated, most of the top routes are located towards the centre of the Borough, mainly in Guildford Town Centre and towards Jacobs Well.

Similarly, the cohesive networks identified by the CyIPT tool includes the top routes mentioned above and others, including:

Figure 36. Cycling infrastructure prioritisation toolkit for Guildford

- » Guildford Town Centre access to Boxgrove and Merrow
- » Guildford Town Centre to Abbotswood and Burpham
- » Access to Shalford
- » Link to Worplesdon

The aim of the LCWIP is to fill in the gaps in the existing network with the cycle corridors that were identified as top priorities within the Borough.

1 https://www.cyipt.bike/

4.2.15. Strava

Publicly available data for cycle trips recorded using Strava were also reviewed[1]. Strava is a mobile and internet-based application for tracking various activities (i.e., cycling, running, etc.). The data presented represents cycle trips recorded by users of Strava's app[2]. Although the data tends to be skewed more heavily towards leisure/recreational trips rather than utilitarian trips, it provides a snapshot of preferred routes that supplement the commuter cycling trips provided in the PCT analysis.

Strava is publicly available as an online heatmap, which illustrates routes that are more heavily used by people cycling. The Strava data for Guildford Borough is shown in Figure 37.

The Strava data highlights some the Borough's leisure/recreation areas which are known to be popular amongst recreational/sport cyclists, through Surrey Hills, and many of the rural country lanes in the east of the Borough. Other routes with relatively high usage include:

Figure 37. Strava cycling trips heatmap (2023)

- » Basingstoke Canal
- » Pirbright Road (between Ash and Pirbright)
- » Shalford Road
- » Shere Road
- » Sections of the A25

1 https://www.strava.com/

2 The Strava data is illustrative only, limited to those trips recorded by Strava users and with data privacy settings allowing public access. Hence, the Strava data only reflects journeys by a limited number of users and may not reflect a representative proportion of trips types (e.g., commuting, utilitarian journeys) or types of cyclists.

4.3. Summary of Key Findings

The evidence base review provided a wealth of data and information related to walking and cycling in Guildford, the population data and locations of key destinations. The higher density and proximity of trip attractors leads to a higher propensity for walking and cycling in these areas of the Borough, as demonstrated by the PCT data.

- Census data indicates that Guildford Borough is one of the least deprived areas in the country, with relatively high levels of car ownership and affluence.
- Travel movements are concentrated in the centre of the Borough, within Guildford Town Centre and its periphery, as well as a few key east-west and north south routes.
- Commuting data highlights the importance of linkages to Guildford Town Centre, the University of Surrey as well as access to railway stations to facilitate linked active travel/public transport journeys.
- There are several physical barriers that sever active travel networks, including railway lines, rivers and A roads.
- The topography of Guildford Borough is steep in places, with the Surrey Hills in the southern and eastern areas potentially deterring cycling activity.
- Collision history is reflective of settlement patterns, with the highest occurrences of cycle and pedestrian collisions recorded in the populated areas of Guildford Town.
- A number of online public engagement tools were available, which captured existing public input on active travel issues and suggestions. Mapping of this data highlights perceived local priorities amongst the general public.
- The PCT indicates a relatively high propensity for cycling in Guildford Borough, both for commuter and school trips. Propensity is again highest in the built-up urban areas of Guildford Town Centre, south to Shalford and to the west in Ash.